

(FILE 'HOME' ENTERED AT 07:49:19 ON 14 MAY 2004)

FILE 'MEDLINE, AGRICOLA, CAPLUS, BIOSIS, EMBASE, WPIDS' ENTERED AT  
07:49:50 ON 14 MAY 2004

L1 0 S (2.7.6.1 OR (RIBOSE-PHOSPHATE ADJ PYROPHOSPHOKINASE) OR (PRPP  
L2 0 S (2.7.6.1 OR (RIBOSE-PHOSPHATE (W) PYROPHOSPHOKINASE) OR (PRPP  
L3 1 S ((5-PHOSPHORIBOSYL-1-PYROPHOSPHATE (W) SYNTHETASE) OR (5-PHOS  
L4 0 S ((PYROPHOSPHORIBOSYLPHOSPHATE (W) SYNTHETASE) OR (RIBOPHOSPHA

FILE 'REGISTRY' ENTERED AT 08:03:23 ON 14 MAY 2004

L5 0 S (PRPP(W)SYNTHETASE)/CN  
L6 1 S 9015-83-2

FILE 'MEDLINE, AGRICOLA, CAPLUS, BIOSIS, EMBASE, WPIDS' ENTERED AT  
08:06:19 ON 14 MAY 2004

L7 1 S L6 AND GOSSYPPII  
L8 150 S L6 AND PURIF?  
L9 90 DUP REM L8 (60 DUPLICATES REMOVED)  
L10 2 S L9 AND (YEAST OR FUNGI OR FUNGUS)

FILE 'CAPLUS' ENTERED AT 08:13:09 ON 14 MAY 2004

L11 E POMPEJUS M/AU 25  
3 S (E4) AND (GOSSYPPII)  
E SEULBERGER H/AU 25  
L12 4 S (E3 OR E4) AND (GOSSYPPII)  
E HOFFKEN H/AU 25  
L13 1 S (E3 OR E4 OR E5) AND (GOSSYPPII)  
E DOVAL J L/AU 25  
E DOVAL J/AU 25  
L14 0 S (E3 OR E6) AND (GOSSYPPII)  
E JIMENEZ A/AU 25  
L15 1 S (E3 OR E39) AND (GOSSYPPII)  
E GARCIA MARIA/AU 25  
L16 0 S (E3 OR E4 OR E8 OR E11) AND (GOSSYPPII)  
L17 0 S (E3 OR E4 OR E8 OR E11) AND (GOSSYPPII)  
L18 1 S (L11 AND L12 AND L13 AND L15) AND L6  
L19 1 S (L11 OR L12 OR L13 OR L15) AND L6

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SRNT

Type	Hits	Search Text	DBs	Time Stamp
1 BRS	2	6391603.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/05/13 15:24
2 BRS	34	phosphoribosylpyrophosphate adj synthetase	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/05/13 16:01
3 BRS	14013	2.7.6.1 or (ribose-phosphate adj pyrophosphokinase) or (PRPP adj synthetase) or (phosphoribosylpyrophosphate adj synthetase) or (PPRibp adj synthetase) or (PP-ribose near3 synthetase) or (5-phosphoribosyl-1-pyrophosphate synthetase) or (5-phosphoribose adj pyrophosphorylase) or (5-phosphoribosyl-alpha-1-pyrophosphate adj synthetase) or (phosphoribosyl-diphosphate adj synthetase) or (phosphoribosylpyrophosphate adj synthase) or (pyrophosphoribosylphosphate adj synthetase) or (ribophosphate adj pyrophosphokinase) or (ribose-5-phosphate adj pyrophosphokinase)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/05/13 16:08
4 BRS	6	((2.7.6.1 or (ribose-phosphate adj pyrophosphokinase) or (PRPP adj synthetase) or (phosphoribosylpyrophosphate adj synthetase) or (PPRibp adj synthetase) or (PP-ribose near3 synthetase) or (5-phosphoribosyl-1-pyrophosphate synthetase) or (5-phosphoribose adj pyrophosphorylase) or (5-phosphoribosyl-alpha-1-pyrophosphate adj synthetase) or (phosphoribosyl-diphosphate adj synthase) or (phosphoribosylpyrophosphate adj synthetase) or (pyrophosphoribosylphosphate adj synthetase) or (ribophosphate adj pyrophosphokinase) or (ribose-5-phosphate adj pyrophosphokinase)) and gossypii) and (pompejus.in. or seulberger.in. or hoffken.in. or doval.in. or jimenez.in. or garcia.in.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/05/13 16:09
5 BRS	49	(2.7.6.1 or (ribose-phosphate adj pyrophosphokinase) or (PRPP adj synthetase) or (phosphoribosylpyrophosphate adj synthetase) or (PPRibp adj synthetase) or (PP-ribose near3 synthetase) or (5-phosphoribosyl-1-pyrophosphate synthetase) or (5-phosphoribose adj pyrophosphorylase) or (5-phosphoribosyl-alpha-1-pyrophosphate adj synthetase) or (phosphoribosyl-diphosphate adj synthetase) or (phosphoribosylpyrophosphate adj synthase) or (pyrophosphoribosylphosphate adj synthetase) or (ribophosphate adj pyrophosphokinase) or (ribose-5-phosphate adj pyrophosphokinase)) and gossypii	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/05/13 16:12



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Search	Most Recent Queries	Time	Result
#15	Search <b>gossypii</b> and <b>synthetase</b>	08:27:52	<u>2</u>
#13	Search <b>gossypii</b> and <b>synthase</b>	08:27:18	<u>3</u>
#11	<b>Related Articles</b> for PubMed (Select <b>14020753</b> )	08:25:14	<u>210</u>
#7	Search <b>gossypii</b>	08:24:53	<u>111</u>
#9	Search <b>#7</b> and <b>purification</b>	08:24:18	<u>13</u>
#6	<b>Related Articles</b> for PubMed (Select <b>2169413</b> )	08:22:39	<u>126</u>
#4	Search <b>#1</b> AND <b>purified</b>	08:22:08	<u>28</u>
#2	Search <b>#1</b> AND <b>purification</b>	08:21:24	<u>36</u>
#1	Search <b>2.7.6.1[EC/RN Number]</b> Limits: ignored	08:09:16	<u>379</u>

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May 12 2004 06:43:50

## IUBMB Enzyme Nomenclature

**EC 2.5.1.9**

**Common name:** riboflavin synthase

**Reaction:** 2 6,7-dimethyl-8-(1-D-ribityl)lumazine = riboflavin + 4-(1-D-ribitylamino)-5-amino-2,6-dihydroxypyrimidine

**Other name(s):** heavy riboflavin synthase; light riboflavin synthase; riboflavin synthetase; riboflavine synthase; riboflavine synthetase

**Systematic name:** 6,7-dimethyl-8-(1-D-ribityl)lumazine:6,7-dimethyl-8-(1-D-ribityl)lumazine 2,3-butanediyltransferase

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**Comments:** A flavoprotein (riboflavin).

**Links to other databases:** [BRENDA](#), [EXPASY](#), [KEGG](#), [ERGO](#), CAS registry number: 9075-82-5

**References:**

1. Plaut, G.W.E. Studies on the nature of the enzymic conversion of 6,7-dimethyl-8-ribityllumazine to riboflavin. *J. Biol. Chem.* 238 (1963) 2225-2243.
2. Plaut, G.W.E. and Harvey, R.A. Riboflavin synthetase. *Methods Enzymol.* 18B (1971) 527-538.
3. Wacker, H., Harvey, R.A., Winestock, C.H. and Plaut, G.W.E. 4-(1'-D-Ribitylamino)-5-amino-2,6-dihydroxypyrimidine, the second product of the riboflavin synthetase reaction. *J. Biol. Chem.* 239 (1964) 3493-3497.

[EC 2.5.1.9 created 1972]

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